REMARKS

In the Office Action the Office, having reopened prosecution under 37 CFR 1.114, cites again US 4,548,612 (Kayane et al.) as a primary reference and US 5,560,770 (Yatake) as a secondary reference together with Kayane et al. under 35 USC § 103.

In the "Detailed Action" the Office relies in particular on Kayane and does not distinguish between the different kinds of composition Claims, i.e. between the Claims directed to the dye solutions (Claims 12-15, 23, 24 and 26-30) and the Claims directed to the printing pastes (Claim 19) and stock solutions (Claim 20).

Kayane describes two kinds of compositions, i.e.

(1) Dry compositions as compositions that are stable to storage
(2) Aqueous use compositions, in particular for exhaust dyeing, padding or printing.

With particular regard to (1) Kayane recognises the problem of instability of reactive dyes in the presence of water (column 1, lines 10-14). For obtaining a storage stable composition of the defined reactive dyes Kayane does not propose any liquid aqueous form of the dyes, but produces a dry composition that contains the defined particular reactive dyes and a defined buffer. In these dry reactive dye compositions no urea and no urea derivative is mentioned. More particularly, with the compositions of kind (1) Kayane teaches away from preparing aqueous reactive dye compositions that would be stable to storage, but teaches to prepare defined dry compositions (with no mention of urea).

With particular regard to (2) Kayane further describes also the use of the dry dye compositions, in particular for exhaustion dyeing (column 4, lines 45-54), padding (column 4, lines 55-58) and printing with printing pastes (column 4, line 59, – column 5, line 5). In this urea is only mentioned at column 5, in line 4, as a possible printing assistant that may be used along with a thickener (such as sodium alginate mentioned in line 2). As for (2) Kayane teaches the production of aqueous use compositions and mentions urea only in addition to a thickener (in particular sodium alginate). In the examples Kayane illustrates, in examples 1-12, the production of dry dye compositions (these do not contain any urea), while in examples 13-23 Kayane illustrates the use of the dry compositions for dyeing, padding or printing, urea being mentioned only in those containing sodium alginate, i.e. as an assistant for the thickener.

According to the present invention, in particular as claimed in Claims 12-15, 23, 24 and 26-30, there are provided aqueous compositions (P) which are aqueous solutions of high storage stability, as described at page 6, in lines 13-21.

In the sentence in the last six lines at page 2 of the Office Action the Examiner objects to Claims 13, 14, 15, 19 and 30 by citing the printing paste of example 15 of Kayane as comprising 5 parts (percentage) of the dye. Example 15 of Kayane contains less than 5 % of pure dye because the 5 % or parts mentioned are not pure dye but dye composition of example 3, which is composed of about 86 % (or less depending on the amount of by-products e.g. sodium chloride still present) of dye and about 14 % (or less depending on the presence of the above mentioned by-products) of buffer salt. Thus the colour paste of example 15 of Kayane contains only about 4.3 % or less of dye. In the colour paste of Example 15 of Kayane, the total amount of water is 85.5 % (47.5 % in the thickener + 25 % added as hot water + 13 % balance). Claim 15,

to which the Examiner explicitly refers, is not directed to a printing paste but to a dye solution. In the same sentence the Examiner refers to Claim 19 – which is directed to printing pastes – for the mention of the thickener. At page 3 of the Office Action in lines 7-10 the Examiner mentions the thickener as if it were a component (F). In this regard however reference is made to the particular wording of Claim 19, in which there is claimed a printing paste, which is prepared with a composition (P) according to Claim 12, and further comprises a thickener. This means that component (F) mentioned in Claim 12 does not comprise a thickener, but the thickener in Claim 19 is a further component. In other words, component (F) is only a formulating additive in the solution of Claim 12 and does not comprise the thickener. This indirectly also results from the more detailed description of (F) in Claim 13 or also from the specification at page 6, in the third complete paragraph, in particular in lines 13 and 14, where it is stated that the compositions (P) – which, as defined at page 2, in lines 1-2, are aqueous solutions – are readily pourable and fluid, with a viscosity in general below 1000 cP.

Urea is an additive conventionally employed in printing pastes in which it acts as a hydrotrope. This is also mentioned in the present specification at page 7, in line 24. In Kayane there is no mention or suggestion of any derivatives of urea that might be usable as a hydrotrope like urea in printing pastes containing a thickener.

With particular reference to Claims 12-15, 23, 24, 26 and 28-30, the wording "consisting essentially of" employed in independent Claim 12 excludes the presence of significant amounts of any other components than those defined in the Claims, in particular also of thickeners, and the wording "consisting of" employed in independent Claim 27, also excludes the presence of significant amounts of any other components than those defined in the Claim.

Yatake discloses certain ink compositions for ink jet recording that contain a dye and water and are based on a particular solvent or/and solubiliser system comprising PGmBE (propylene glycol mono-n-butyl ether) and/or DPGmBE (dipropylene glycol mono-n-butyl ether) and a water soluble glycol ether other than PGmBE and DPGmBE. The dye may belong to a broad choice of dyes of various categories, as mentioned in the text from column 5, line 33, to column 6, line 34. The ink composition may further contain a broad choice of possible other components, as mentioned in the text from column 3, line 44, to column 5, line 31, urea and/or a urea derivative being mentioned at column 3, in lines 44 to 50.

These compositions are not printing pastes and the mentioned urea and urea derivatives are not employed as optional further additives to a printing paste thickener as described in Kayane. In Yatake an improvement of stability is mentioned at column 4, in lines 5-7, for inks containing thioglycol, while this is not mentioned for inks containing urea or a urea derivative.

Yatake does not mention any dry compositions of the kind of (1) above of Kayane and does not mention exhaustion, padding or printing methods or compositions of the kind of (2) above of Kayane. In particular Yatake does not describe urea as a printing assistant for a thickener. Urea used in Yatake has a different function than in Kayane (i.e. is not "equivalent"), and thus the skilled artisan looking for a solution to the problem of storage instability of reactive dye compositions will find in Kayane only the teaching of producing certain dry compositions, from which then certain use compositions – e.g. printing pastes containing sodium alginate as a thickener and urea as a hydrotrope for the thickener – may be prepared. In Yatake he will only find the teaching to use thioglycol in order to improve the stability of a defined ink composition for ink jet recording. The printing pastes of Kayane and the ink compositions for ink jet recording of Yatake are not equivalent and thus are also not interchangeable.

While in Yatake the results set out in the various tables show mainly differences due to the various kinds and proportions of the employed substantial amounts of glycolethers and diols, urea and the urea derivatives mentioned in Yatake cannot be regarded as being equivalent in an aqueous composition as their properties in water (e.g. already their solubilities) are different.

Thus Kayane does not contain any reason or suggestion for a combination with Yatake. But even if they were combined, this would not result in the claimed invention.

In the paragraph bridging pages 3 and 4 of the Office Action the Examiner concludes that "in view of the teaching of the secondary reference one having ordinary skill in the art would be motivated to modify the primary reference of Kayane by incorporating the biuret component as taught by Yatake to make such a composition with a reasonable expectation of success". In the mention of "success" there must be meant at least one property to which the success shall refer. If the property is the stability, Kayane teaches a dry composition as defined, without urea, and Yatake teaches to use thioglycol along with the defined ethers. For the production of a print Kayane teaches the use of the defined colour pastes on textile substrates, while Yatake teaches the use of the defined non-clogging inks on recording paper (which usually is a coated paper).

For the reasons explained above it is considered that one of ordinary skill in the art would not be motivated to combine Yatake with Kayane, especially because the compositions described in these two documents are of a different kind and have different properties.

With regard to the objection to Claim 20, it is observed that Kayane mentions urea only in connection with the thickener and thus the dye solutions of

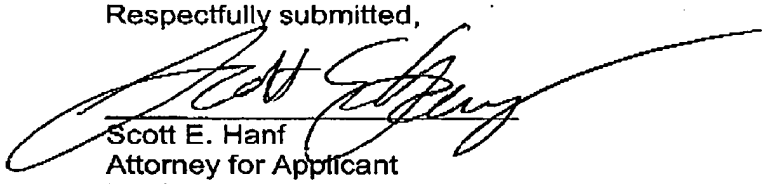
Kayane without thickener, e.g. as exemplified in Examples 13, 14, 16, 17, 19 and 21-23, do not contain any urea.

Applicants have added a new dependant claim 31, which is supported by the specification on page 4 lines 19-22.

As the total number of claims does not exceed the number of claims originally paid for, no fee is believed due. However if an additional fee is required, the Commissioner is hereby authorized to credit any overpayment or charge any fee deficiency to Deposit Account No. 03-2060.

Reconsideration and allowance of this application is respectfully requested.

Respectfully submitted,



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